

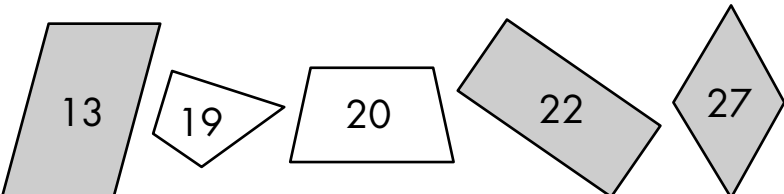
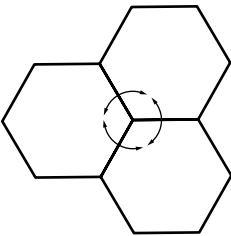


About the Mathematics in This Unit (page 1 of 2)

Dear Family,

Our class is starting a new mathematics unit about geometry and measurement called *Measuring Polygons*. During this unit, students investigate the classification of polygons by attributes such as length of sides and size of angles. They solve problems about perimeter, a linear measure, and area, a two-dimensional measure. Students also investigate relationships among mathematically similar figures.

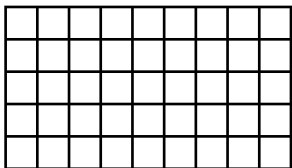
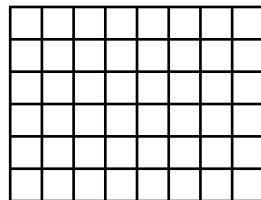
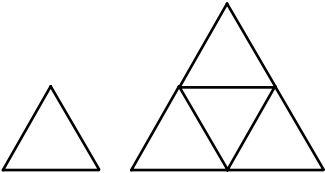
Throughout the unit, students work toward these goals:

BENCHMARK/GOAL	EXAMPLES
Identify different quadrilaterals by attribute, and know that some quadrilaterals can be classified in more than one way.	<p>Which of these figures are parallelograms? How do you know?</p>  <p>Figures 13, 22, and 27 are parallelograms. Each of these figures has both pairs of opposite sides parallel.</p>
Use known angle sizes to determine the sizes of other angles (30° , 45° , 60° , 90° , 120° , and 150°).	 <p>$360 \div 3 = 120$</p> <p>When I put three of the hexagons together, three of the angles make a circle in the middle. The circle has 360°, so each angle is 120°.</p>

(continued)



About the Mathematics in This Unit (page 2 of 2)

BENCHMARK/GOAL	EXAMPLES
Determine the perimeter and area of rectangles.	<p data-bbox="517 480 1323 591">Draw two different rectangles so that each one has a perimeter of 28 inches. Do your rectangles have the same area?</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="517 612 918 1002">  <p data-bbox="517 795 918 966"> $5 + 5 + 9 + 9 = 28$ The perimeter is 28 inches. $5 \times 9 = 45$ The area is 45 square inches. </p> </div> <div data-bbox="927 612 1323 1002">  <p data-bbox="927 832 1323 1002"> $6 + 6 + 8 + 8 = 28$ The perimeter is 28 inches. $6 \times 8 = 48$ The area is 48 square inches. </p> </div> </div> <p data-bbox="517 1012 1323 1087">These two rectangles have the same perimeter, but different areas.</p>
Identify mathematically similar polygons.	<p data-bbox="517 1102 1323 1138">Are the two triangles below similar? How do you know?</p> <div style="text-align: center;">  </div> <p data-bbox="517 1332 1323 1489">The triangles are similar. They are both equilateral triangles, so they both have three 60° angles. The side lengths of the larger triangle are twice as long as the side lengths of the smaller triangle.</p>

In our math class students spend time discussing problems in depth and are asked to share their reasoning and solutions. It is important that children solve math problems in ways that make sense to them. At home, encourage your child to explain the math thinking that supports those solutions.

Please look for more information and activities about *Measuring Polygons* that will be sent home in the coming weeks.